

Uncertain input data problems and the worst scenario method

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Abstract

First, a general abstract scheme is presented for the worst scenario method. Second, the method is applied in the framework of the fuzzy set theory. Third, a survey is given of applications in the following types of mathematical models: quasi-linear elliptic boundary value problems, parabolic equations and inequalities, elastic and thermoelastic beams, Kármán plate bending model, contact problems in elasticity, three models of elasto-plasticity.